

where one of R_{1ab} , R_{1ac} and R_{1ad} is H and the other two are independently alkyl, hydroxy, nitro, halo, $-OR_6$, $-NR_7R_8$, $-C(O)_qH$, or $-C(O)_qR_6$.

14. (Amended) A compound of claim 13 wherein R_{1ac} is H.

16. (Amended) A compound of claim 12 where

X_2 is NZ_{3a} ;

Z_{3a} is $-C(O)_qZ_{6a}$;

n is 2; and

m is 2.

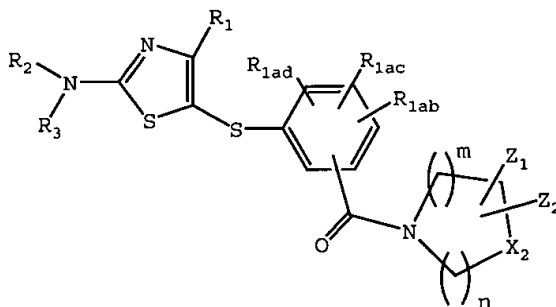
REMARKS

Claim 15

Applicants have cancelled claim 15 as being drawn to non-elected subject matter.

Claim 7

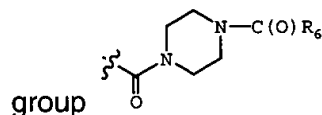
Applicants have amended claim 7 to limit the scope to compounds of formula



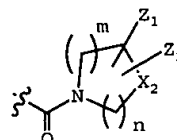
Applicants submit that this formula more fairly reflects the compounds of the present invention than the extremely narrow "generic concept" set forth by the Examiner. As explained in the petition accompanying this response, Applicants submit that the procedure used by the Examiner in recasting of the claims to the overly narrow "generic concept" improperly limits the scope of Applicants claims.

The specific differences between the Applicant's formula and the Examiner's "generic concept" are as follows:

- The Examiner's "generic concept" requires that the phenyl group be substituted with the



(i.e., the specific substituent used in the elected species), while



Applicant's formula allows substitution with the group (which is disclosed in original claim 16 and thus introduces no new matter);

- Applicant's formula allows three optional substituents on the phenyl ring (R_{1ab} , R_{1ac} , and R_{1ad}) while the Examiner's "generic concept" only allows two and arbitrarily limits their definitions; and
- Applicant's formula allows R_2 and R_3 to retain their original scope, while the Examiner's "generic concept" has arbitrarily limited R_2 and R_3 .

Claims 8, 10, 12, 14 and 16

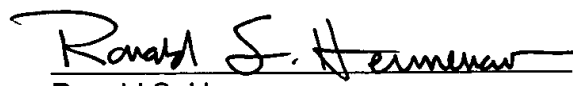
Applicants have amended claims 8, 10, 12, 14 and 16 in order to better conform with amended claim 7.

Conclusion

Applicants respectfully request that the Examiner enter the amendments herein and pass all pending claims to allowance.

Respectfully submitted,

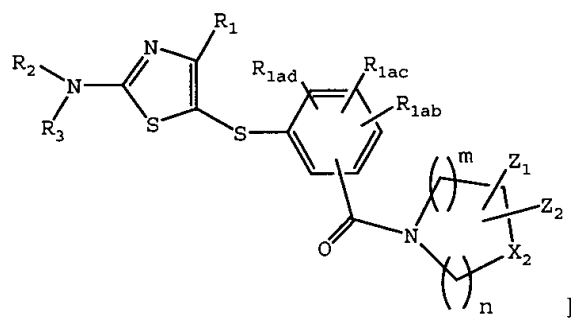
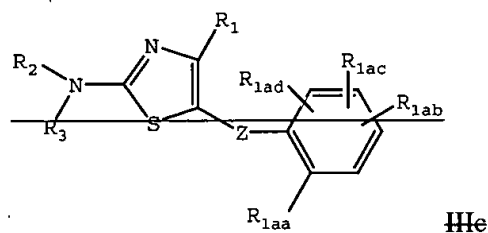
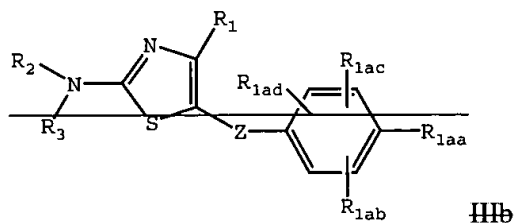
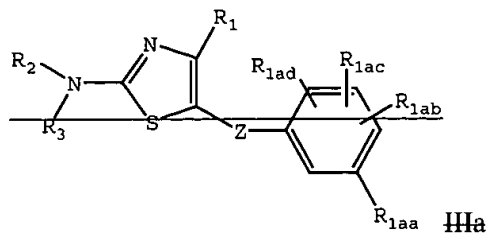
Bristol-Myers Squibb Company
Patent Department
P.O. Box 4000
Princeton, NJ 08543-4000
(609) 252-5781


Ronald S. Hermenau
Attorney for Applicants
Reg. No. 34,620

Date: 1/6/03

MARKED-UP VERSION OF AMENDED CLAIMS

7. (Twice Amended) A compound of formula I ~~IIIa, IIIb or IIIc~~



~~including~~ diastereomers, enantiomers and/or salts thereof

where

Z is S;

R₁, R_{1ab}, R_{1ac} and R_{1ad} are independently

- (1) hydrogen or R₆,
- (2) -OH or -OR₆,
- (3) -SH or -SR₆,
- (4) -C(O)_qH, -C(O)_qR₆, or -O-C(O)_qR₆, where q is 1 or 2,
- (5) -SO₃H or -S(O)_qR₆,
- (6) halo,
- (7) cyano,

- (8) nitro,
- (9) $-Z_4-NR_7R_8$,
- (10) $-Z_4-N(R_9)-Z_5-NR_{10}R_{11}$,
- (11) $-Z_4-N(R_{12})-Z_5-R_6$, or
- (12) $-P(O)(OR_6)_2$;

~~R_{14a} is $-C(O)_qH$, $-C(O)_qR_6$, $-Z_4-NR_7R_8$, $-Z_4-N(R_9)-Z_5-NR_{10}R_{11}$ or $-Z_4-N(R_9)-Z_5-R_6$;~~

R_2 and R_3 are each independently H, $-Z_4-R_{6a}$, or $-Z_4-NR_{7a}R_{8a}$;

~~R_4 , R_{4a} , R_5 and R_{5a} are each independently hydrogen, alkyl, aryl, aralkyl, cycloalkyl, or heteroarylalkyl;~~

R_6 , R_{6a} , and R_{6b} and R_{6c} are independently alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, aralkyl, heterocyclo, or heterocycloalkyl, each of which is unsubstituted or substituted with Z_1 , Z_2 and one or more groups Z_3 ,

~~R_7 , R_{7a} , R_8 , R_{8a} , R_9 , R_{10} , R_{11} and R_{12}~~

- (1) are each independently hydrogen, or $-Z_4R_{6b}$; or
- (2) ~~R_7 and R_8~~ or R_{7a} and R_{8a} may together be alkylene, alkenylene, or heteroalkylene, completing a 3- to 8-membered saturated or unsaturated ring with the nitrogen atom to which they are attached, which ring is unsubstituted or substituted with Z_1 , Z_2 and one or more groups Z_3 , or
- (3) any two of R_9 , R_{10} and R_{11} may together be alkylene, alkenylene or heteroalkylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is unsubstituted or substituted with one or more Z_1 , Z_2 and Z_3 ;

X_2 is CZ_{3a} , NZ_{3a} , O or S;

Z_{3a} is H, hydroxy, optionally substituted alkyl, optionally substituted heterocyclo, optionally substituted aryl, optionally substituted aralkyl, $-OZ_6$, $-C(O)_qH$, $-C(O)_qZ_{6a}$, $-Z_4-NZ_7Z_8$, or $-Z_4-N(Z_{10})-Z_5-Z_6$;

n is 1 to 3;

m is zero to 2;

Z_1 , Z_2 and Z_3 are each independently

- (1) hydrogen or Z_6 ,
- (2) $-OH$ or $-OZ_6$,
- (3) $-SH$ or $-SZ_6$,
- (4) $-C(O)_qH$, $-C(O)_qZ_6$, or $-O-C(O)_qZ_6$,
- (5) $-SO_3H$, $-S(O)_qZ_6$, or $S(O)_qN(Z_9)Z_6$,
- (6) halo,
- (7) cyano,
- (8) nitro,
- (9) $-Z_4-NZ_7Z_8$,

(10) $-Z_4-N(Z_9)-Z_5-NZ_7Z_8$,

(11) $-Z_4-N(Z_{10})-Z_5-Z_6$,

(12) $-Z_4-N(Z_{10})-Z_5-H$,

(13) oxo,

(14) any two of Z_1 , Z_2 , and Z_3 on a given substituent may together be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached; or

(15) any two of Z_1 , Z_2 , and Z_3 on a given substituent may together be $-O-(CH_2)_q-O-$;

Z_4 and Z_5 are each independently

(1) a single bond,

(2) $-Z_{11}-S(O)_q-Z_{12}-$,

(3) $-Z_{11}-C(O)-Z_{12}-$,

(4) $-Z_{11}-C(S)-Z_{12}-$,

(5) $-Z_{11}-O-Z_{12}-$,

(6) $-Z_{11}-S-Z_{12}-$,

(7) $-Z_{11}-O-C(O)-Z_{12}-$,

(8) $-Z_{11}-C(O)-O-Z_{12}-$; or

(9) alkyl

Z_6 and Z_{6a} are independently

(i) alkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, aralkyl, alkylaryl, cycloalkylaryl, heterocyclo, or heterocycloalkyl;

(ii) a group (i) which is itself substituted by one or more of the same or different groups (i); or

(iii) a group (i) or (ii) which is independently substituted by one or more of the groups (2) to (15) of the definition of Z_1 ;

Z_7 , Z_8 , Z_9 and Z_{10}

(1) are each independently hydrogen or $-Z_4-Z_{6a}$;

(2) Z_7 and Z_8 may together be alkylene, alkenylene, or heteroalkylene completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is unsubstituted or substituted with one or more Z_1 , Z_2 and Z_3 , or

(3) Z_7 or Z_8 , together with Z_9 , may be alkylene, alkenylene, or heteroalkylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is unsubstituted or substituted with one or more Z_1 , Z_2 and Z_3 ;

Z_{11} and Z_{12} are each independently

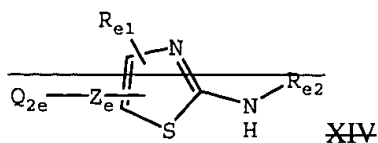
(1) a single bond,

(2) alkylene,

(3) alkenylene, or

(4) alkynylene;

provided said compound is other than a compound of formula XIV



where

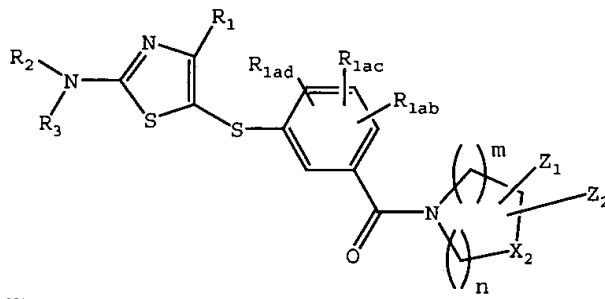
Z_e is $-S-$;

Q_{2e} is phenyl optionally substituted with one group selected from halo, hydroxy, alkoxy, nitro, $-NH_2$, $-alkyl(NH_2)$, $-C(O)NH_2$, $-alkylC(O)NH_2$ or $-arylC(O)NH_2$;

R_{e1} is H, alkyl, hydroxyalkyl, halogen or carboxy; and

R_{e2} is H, $-C(O)alkyl$, $-SO_2alkyl$ or $-C(O)phenyl$ optionally substituted with halogen.

8. (Amended) A compound of claim 7 having the formula IIIa:

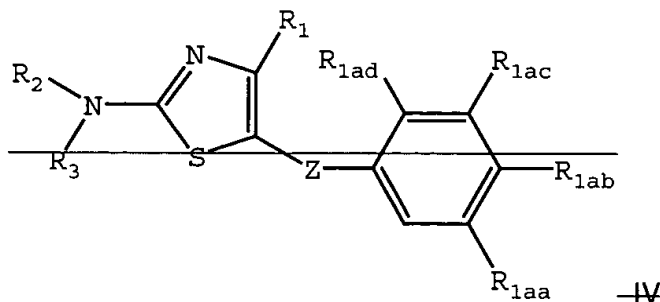


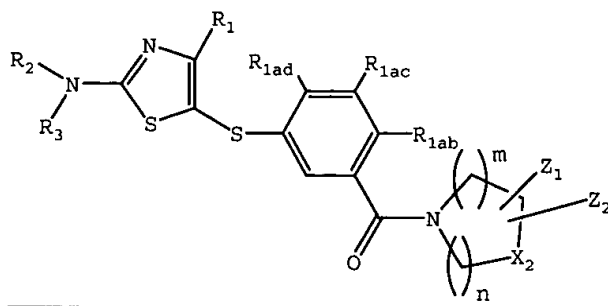
10. (Amended) A compound of claim 9 wherein

R_{4aa} is $-C(O)R_{6a}$ or $-Z_4-NR_7R_8$; and

R_{1ab} , R_{1ac} and R_{1ad} are independently H, alkyl, hydroxy, nitro, halo, $-OR_6$, $-NR_7R_8$, $-C(O)_qH$ or $-C(O)_qR_6$.

12. (Amended) A compound of claim 8 having the following formula IV

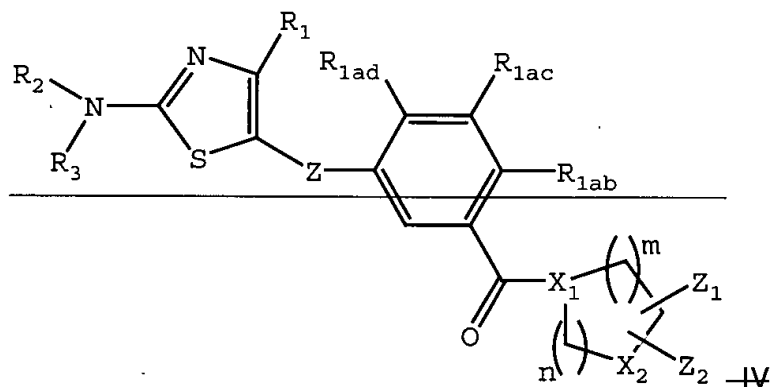




where one of R_{1ab} , R_{1ac} and R_{1ad} is H and the other two are independently alkyl, hydroxy, nitro, halo, $-OR_6$, $-NR_7R_8$, $-C(O)_qH$, or $-C(O)_qR_6$.

14. (Amended) A compound of claim 13 wherein Z is ~~S~~ and R_{1ac} is H.

16. (Amended) A compound of claim 12 ~~having the following formula V~~



where

~~X_1 is C or N;~~

~~X_2 is CZ_{3a} , NZ_{3a} , O or S;~~

~~Z_{3a} is H, hydroxy, optionally substituted alkyl, optionally substituted heterocycle, optionally substituted aryl, optionally substituted aralkyl, $-OZ_6$, $-C(O)_qH$, $-C(O)_qZ_{6a}$, $-Z_4-NZ_7Z_8$, or $-Z_4-N(Z_{10})-Z_5-Z_6$;~~

~~n is 1 to 3;~~ and

~~m is zero to 2.~~